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Who Will Pay for Needed Infrastructure?

Natural Gas Market Outlook

2006 – 2016

Workshop Sponsored by CPUC and CEC

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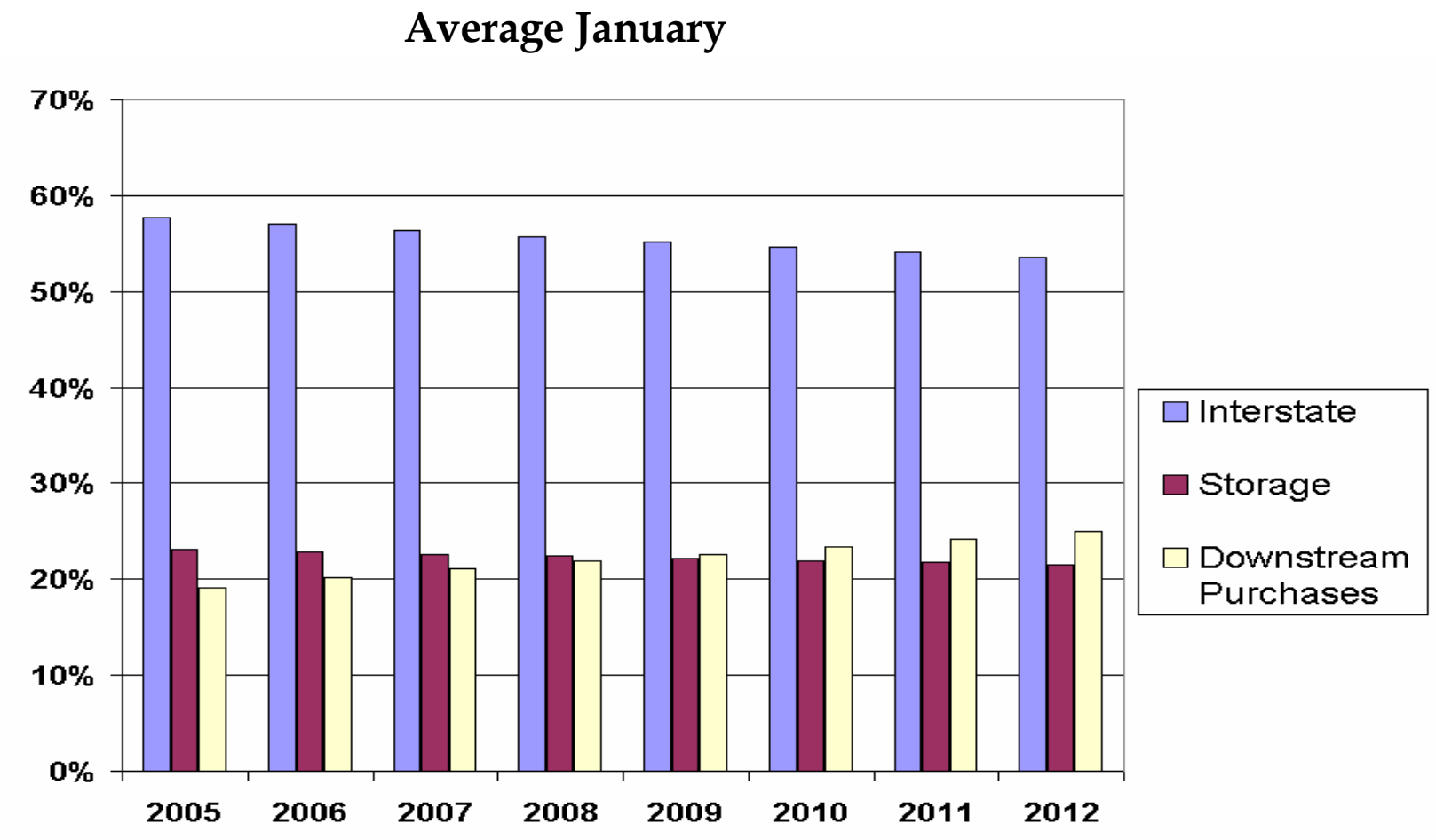
Overview of discussion

- Core transportation and storage portfolio design
- Intrastate slack capacity guidelines

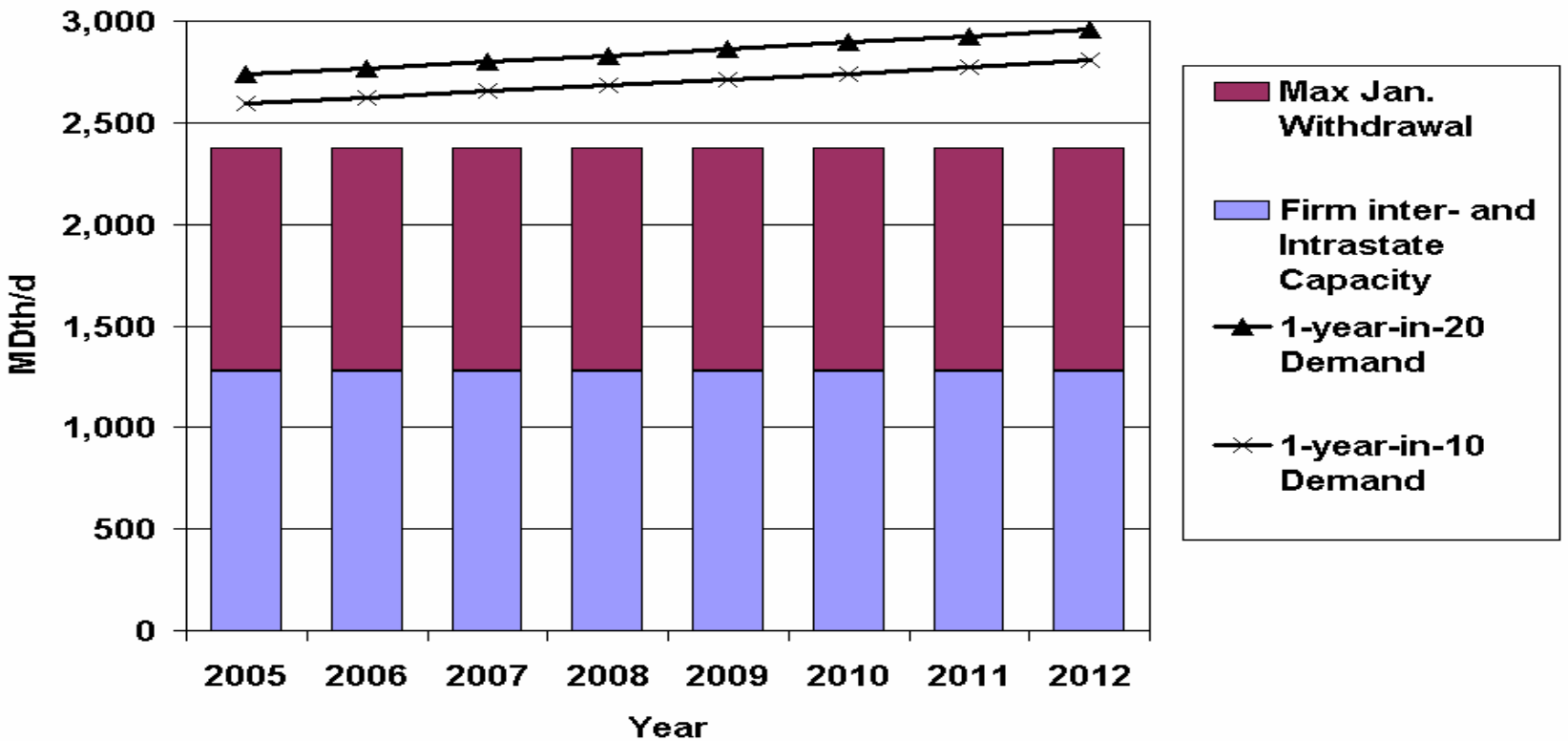
Key first step in developing a Core portfolio for transport and storage

- Establish two key "risk tolerance" parameters:
  - ⇨ Desired degree of exposure to downstream markets (on average)
    - Percentage demand met with purchases at the California border or Citygate
  - ⇨ Desired Peak-day reliability planning criteria
    - Maximum demand that can be met with gas flowing over firm transport and from storage
- These are fundamental policy considerations and the CPUC needs to provide guidance

Forecasted Core supply mix with current interstate capacity and storage holdings



January Core peak-day supply-demand balance



Core Interstate Capacity Holdings

		MDth/D	Expiration Date
Transcanada (NOVA)		596	Annual renewal
Transcanada (B.C. system)		587	October-05
Gas Transmission Northwest		610	October-05
Transwestern		150	March-07
El Paso	a	100	April-05
	b	64	December-04
	c	40	March-07
Total Capacity @ CA Border		**964**	

General perspective on Core supply planning

- Over the next 10 years, continue to hold interstate pipeline capacity at roughly current levels for Core customers
  - ⇨ possibly change mix to enhance diversity of supply
- Incremental storage appears to be least-cost approach to meeting 1-in-10 year peak-day planning criteria and to maintaining downstream exposure at current levels
- Need for forward-looking regulatory planning process where the utilities submit capacity plans for Commission approval. After-the-fact reasonableness reviews are unfair and ultimately counterproductive

Stakeholders Need to Agree on Criteria for Capacity Expansions

- There is some inconsistency in the current criteria of "Let the Market Decide," with a slack capacity "guideline" of 10-20%.
  - ⇨ If the market knows the utilities will build slack capacity, it is unlikely to contract for new capacity, which needs to be taken into account when setting rates.
- If the utilities maintain slack capacity, they must have a reasonable opportunity to recover costs for ALL capacity.
  - ⇨ For example, imputing a 95% load factor to the recent Redwood Path expansion of 200 MDth/d creates a disincentive for PG&E to add additional capacity on any path.
- Slack capacity criteria need to be reassessed
  - ⇨ Dry Year measure more appropriate than a Cold Year measure; a dry year increases annual demand twice as much as a cold year.

Estimate of Future Slack Capacity Using CEC Forecast and a Dry Year adder